

**HIGH VOLTAGE, HIGH TEMPERATURE CAPACITOR STRUCTURES  
AND METHODS OF FABRICATING SAME**

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Abstract of the Disclosure

Capacitors and interconnection structures for silicon carbide are provided having an oxide layer, a layer of dielectric material and a second oxide layer on the layer of dielectric material. The thickness of the oxide layers may be from about 0.5 to about 33 percent of the thickness of the oxide layers and the layer of dielectric material. Capacitors and interconnection structures for silicon carbide having silicon oxynitride layer as a dielectric structure are also provided. Such a dielectric structure may be between metal layers to provide a metal-insulator-metal capacitor or may be used as a inter-metal dielectric of an interconnect structure so as to provide devices and structures having improved mean time to failure. Methods of fabricating such capacitors and structures are also provided.

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